

AMENDMENTS TO THE SPECIFICATION:

Please amend the heading beginning at page 1, line 10, as follows:

~~BACKGROUND ART~~

Please amend the heading beginning at page 2, line 6, as follows:

~~DISCLOSURE OF THE INVENTION~~SUMMARY

Please amend the paragraphs beginning at page 2, lines 7 and 10, as follows:

There is thus a need for a DC/DC-rectifier with decreased freewheeling losses and heat development. ~~Thus The~~ need is met by ~~the present invention in that it provides~~ providing a method for use in a DC/DC-rectifier, ~~the~~ The rectifier ~~comprising~~ comprises a transformer and a bridge on the primary side of the transformer, where the primary side bridge comprises a first pair of switches and a second pair of switches, and, on the secondary side of the transformer, a secondary side bridge comprising a first pair of switches and a second pair of switches.

Please amend the paragraph beginning at page 2, line 17, as follows:

~~The method of the invention~~ comprises linking on/off-switching of the first pair of switches on the primary side to the on/off-switching of the first pair of switches on the secondary side, with the linking of the on/off-switching of the first pair of switches on the primary side to the on/off-switching of a first pair of switches on the secondary side being carried out by switching off the first pair on the secondary side when the first pair on the primary side is switched on, and conversely, when the first pair on the primary side is switched off.

Please amend the paragraph beginning at page 3, line 1, as follows:

~~By means of the invention,~~ Having the switches on the secondary side of the transformer ~~will be~~ in an “on-state” most of the time, ~~as opposed to prior art. This will cut~~ cuts down switching losses on the secondary side, ~~as well as also~~ and significantly ~~reducing~~ reduces the freewheeling losses. The reduction of freewheeling losses ~~offered by the invention~~ comes in part from the fact that the freewheeling current will not have to pass through the transformer, since at least one pair of switches will always be in an on-state when the freewheeling occurs, thus offering a path for the current.

Please amend the heading beginning at page 3, line 10, as follows:

BRIEF DESCRIPTION OF THE DRAWINGS

Please delete the paragraph beginning at page 3, line 11, which starts with:

The invention will be described...

Please amend the paragraph beginning at page 3, line 13, as follows:

Fig 1 is a circuit diagram showing the secondary side of a device ~~according to the invention~~, and

Please amend the paragraph beginning at page 3, line 15, as follows:

Fig 2 is a timing diagram of voltage pulses used for controlling switches in a device ~~according to the invention~~.

Please amend the heading beginning at page 3, line 18, as follow:

~~EMBODIMENTS~~ DETAILED DESCRIPTION

Please amend the paragraph beginning at page 4, line 7, as follows:

On the primary side of the transformer 110, ~~which is not shown in the drawing,~~ there is also a first and a second pair of switches, (A', D') and (B', C') also being connected a manner similar to the connection of the switches on the secondary side, i.e. two parallel lines with two switches in each, each line comprising a switch from each of said pair.

Please amend the paragraphs beginning at page 5, lines 17 and 21, as follows:

The switching losses on the secondary side are virtually eliminated ~~according to the invention,~~ and the freewheeling losses are kept to a minimum ~~by means of the invention,~~ using the following ~~principle:~~ The same voltage pulse train is applied to linked pairs of switches, but the voltage train is inverted when it is applied to the switches on the secondary side, as opposed to the switches on the primary side. If, for example, switches A', D', on the primary side are switched on, the signal which caused them to switch on, is inverted and will cause the linked switch pair A, D, on the secondary side to switch off, and conversely when the switches A', D', on the primary side are caused to switch off.

Please amend the paragraph beginning at page 5, line 29, as follows:

The ~~principle~~ technology described above will become easier to understand if reference is made to fig 2, which is a timing diagram of the control voltages and pulse trains ~~used in the invention.~~

Please amend the paragraph beginning at page 6, line 1, as follows:

Fig 2a is an illustration of the voltage applied to the first pair of switches on the primary side, i.e. the switches A', D'. High voltage indicates that the switches are on, and low voltage indicates that the switches are off. The switching of the switches is controlled by not shown control means,

which is true for the switching for all of the switches in the device ~~according to the invention~~. As can be seen, the switches are turned off for longer periods of time than they are switched on, the importance of which will become apparent later in this description.

Please amend the paragraph beginning at page 6, line 23, as follows:

One of the important ~~factors of the invention~~ can now be understood: with reference to figs 2b and 2d: At ~~at~~ least one pair of switches on the secondary side will always be in the ~~on~~ "on" state. This means that there will be no switching losses on the secondary side, since there is always at least one pair of transistors which can conduct current.

Please amend the paragraph beginning at page 7, line 4, as follows:

The inversion of the control voltage to the switches on the primary side is carried out by means of well known inverting means, which will not be described in more depth here.

Please amend the paragraphs beginning at page 7, lines 8, 13, and 17, as follows:

~~By means of the invention, Because the~~ linked pairs of transistors on either side are thus not turned on simultaneously. ~~The~~ the "normal" state of the switches on the secondary side ~~in a device according to the invention~~ is thus the opposite of the linked switches on the primary side, in the example shown the "on" state. ~~Thus, when~~ When a pair of switches on the primary side is turned on, the corresponding pair on the secondary side is turned off, ~~thus~~ causing that pair not to conduct current. ~~Accordingly, by means of the invention~~ a DC/DC-rectifier is obtained which is simple to design and inexpensive to produce, yet has virtually no switching losses and low freewheeling losses.

Please amend the paragraph beginning at page 7, line 21, as follows:

Finally, it should be pointed out that the switches on the primary side of the bridge can be configured in a large number of different ways ~~within the scope of the invention~~. ~~As For~~ example, as can be seen in ~~fig~~ Fig 2e, ~~a principle of the invention can still be maintained, with a~~ large number of types of bridges on the primary side of the transformer: may be used. ~~fig~~ Fig 2e shows the voltage U over the transformer, and as can be seen, ~~the principle referred to is that the~~ state of the switches on the secondary state is on when the voltage U over the transformer is zero or close to zero.